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EXAMINER

SZMAL, BRIAN SCOTT

ART UNIT PAPER NUMBER

3736

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/068,016	Applicant(s) GIVENS ET AL.	
	Examiner Brian Szmaj	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) 11,46 and 50-57 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-45 is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7-9,12-30,47-49 and 58-67 is/are rejected.
- 7) ☒ Claim(s) 2,3,6 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5-17-04</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 47 is rejected under 35 U.S.C. 102(e) as being anticipated by Horn (6,379,314).

Horn discloses an internet system for testing hearing and further disclose a local processor configured to communicate over a computer network; a tone generator operably associated with the processor, wherein the tone generator is configured to generate tones at a plurality of selected frequencies in the range of 20-20000 Hz; an output device operably associated with the tone generator, wherein the output device is adapted to deliver the tones to the patient; an input device operably associated with the processor, the input device is configured to indicate the patient's response to the tones; and the hearing device is configured to receive commands from a remote site through the processor over the network during the hearing evaluation to select and/or adjust the tones generated by the tone generator. See Column 4, lines 17-19 and 27-44; and Column 5, lines 54-62.

Claim Rejections - 35 USC § 103

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 5, 7-9, 12-14, 18-20, 26-30, 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feezor et al (3,808,354) in view of Horn (6,379,314).

Feezor et al disclose a computer controlled method and system for testing hearing and further disclose administering a hearing evaluation test to a patient, the hearing evaluation test comprising a plurality of hearing assessment signals at selected frequencies and hearing levels; transmitting commands from a test administration site to a local patient testing site during said administering step; generating the hearing assessment signals at the local patient site in response to said transmitting step; interactively relaying information between the patient located at the local site and a clinician located at the test administration site during said administering step so that the clinician can evaluate the patient's response to the hearing assessment signals, the test administration site being remote from the local site; the hearing evaluation test assessment signals are sufficient in number and variation of frequency and sound intensity to allow the clinician to perform a diagnostic hearing evaluation; the auditory tone presentation of the hearing assessment signals during said administering step meets predetermined test standards; controlling the sound intensity of the hearing assessment signals delivered to the patient from said test administration site; the local site is an industrial site; the hearing assessment signals are carried out at a plurality of

frequencies in the range of between about 20-20,000 Hz; the hearing assessment signals comprise tones representing both speech and non-speech signals at frequencies in the range of between about 125-12,000 Hz; controlling the tone presentation of the hearing assessment signals such that the harmonic distortion is less than about 1%; and the hearing evaluation conforms to standardized ANSI requirements. See Column 6, lines 21-24 and 37-62; Column 7, lines 15-19; Column 10, lines 7-15; Column 11, lines 30-31 and 56-64; and Column 34, lines 38-44.

Feezor et al, however fails to disclose performing the test over a computer network; relaying dynamic audiovisual communications of the patient at the local site to the test administration site during said administering step; determining the ambient noise level at the local site and transmitting data regarding the determined noise level to the remote site prior to and/or during said administering step; accepting user input by the patient during said administering test; accepting step is carried out by the patient contacting at least one of a switch and a key on a keyboard; said interactive relaying step includes relaying at least one of audio, audiovisual, visual, and text-based interactive messages between the patient and the clinician in substantial real-time during said administering step.

Horn, as discussed above, disclose an internet based hearing test and further disclose performing the test over a computer network; relaying dynamic audiovisual communications of the patient at the local site to the test administration site during said administering step; determining the ambient noise level at the local site and transmitting data regarding the determined noise level to the remote site prior to and/or during said

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administering step; accepting user input by the patient during said administering test; accepting step is carried out by the patient contacting at least one of a switch and a key on a keyboard; said interactive relaying step includes relaying at least one of audio, audiovisual, visual, and text-based interactive messages between the patient and the clinician in substantial real-time during said administering step. See Column 4, lines 17-19 and 27-44; and Column 5, lines 54-62.

Since both Feezor et al and Horn disclose performing a hearing test over a network, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Feezor et al to include performing the test over a computer network, as per the teachings of Horn, since it would allow multiple users to access a single internet site to test their respective hearing. It also would have been obvious to one of ordinary skill in the art to measure at least one of transient and distortion product emission levels in the ear, since the broadly disclosed hearing tests encompass the claimed types of hearing tests. It also would have been obvious to one of ordinary skill in the art to have the local site be a clinic or a pediatrician's office, since

Feezor et al discloses the use of performing the test in an industrial location, it would have been obvious to perform the test at another location such as a clinic or pediatrician's office.

It also would have been an obvious matter of design choice to a person of ordinary skill in the art to include the use of a voice recognition software in conjunction with the system of Horn, because the Applicant has not disclosed that the use of voice recognition software provides and advantage, is used for a particular purpose, or solves

a stated problem. One of ordinary skill in the art, furthermore, would have expected the Applicant's invention to perform equally well with the input devices of Horn (keyboard and mouse) because, recognizing the reception of a sound during the test can be done by either manual input using a keyboard or mouse, or even using a persons voice to verify the reception of the sound.

3. Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feezor et al (3,808,354) and Horn (6,379,314) as applied to claim 1 above, and further in view of Joao (6,283,761).

Feezor et al and Horn, as discussed above, disclose means for testing hearing over a network, but fail to disclose scheduling an appointment time suitable to the patient and the clinician in advance of said administering step; said scheduling step includes obtaining health provider information and assigning a patient identification number; said scheduling step includes applying for insurance approval; said scheduling step includes accepting an electronic deposit of money to reserve the desired appointment time; and the requested appointment time is confirmed in an electronic message transmitted to the patient based on receipt of insurance provider approval.

Joao discloses a means for processing and/or providing healthcare information over the internet and further disclose scheduling an appointment time suitable to the patient and the clinician in advance of said administering step; said scheduling step includes obtaining health provider information and assigning a patient identification number; said scheduling step includes applying for insurance approval; said scheduling step includes accepting an electronic deposit of money to reserve the desired appointment time; and

the requested appointment time is confirmed in an electronic message transmitted to the patient based on receipt of insurance provider approval. See Column 15, lines 25-47; Column 32, lines 47-63; and Column 37, lines 48-52.

Since Feezor et al, Horn and Joao disclose means for performing functions over a network, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Feezor et al and Horn to include the use of a means for making an appointment over the network, as per the teachings of Joao, since it would provide a means of allowing the patient to schedule the hearing test at an appropriate time.

4. Claims 60-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou (6,322,521) in view of Halpern et al (5,687,717).

Hou discloses a system for an on-line hearing test and further disclose a communication device comprising an interface with the internet, and a controller configured to communicate over a computer network with a remote clinician test administration site in substantially real-time during a hearing test; the remote site is configured to control attenuation of the primary stimulus signal output by the audiometer; the local interface is configured to operate independently of a local personal computer and allow substantially real-time interactive communication between the local and remote sites during the evaluation; the audiometer comprises a tone hearing test that can generate test signals over a plurality of frequencies; the system is configured to provide substantially real-time interaction between the audiometer and the clinician at the remote site to allow the clinician to control a testing protocol; and the system is

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configured to allow the clinician to receive a first patient response corresponding to a first test stimuli, then selectively initiate a suitable next test stimuli that is transmitted to the patient. See Column 5, lines 49-67; Column 6, lines 11-21; Column 7, lines 59-67; Column 8, lines 1-2 and 57-67; Column 9, lines 1 and 16-26; Column 14, lines 59-67; Column 15, lines 1-10; and Column 16, lines 33-45.

Hou however fails to disclose a portable computer; an audiometer in communication with the controller and configured to selectively output a plurality of hearing assessment signals controlled by the remote test site via the network during the hearing test and to receive patient responses thereto.

Halpern et al disclose a means for using remotely operable modules and a portable computer and further disclose a portable computer; an audiometer in communication with the controller and configured to selectively output a plurality of hearing assessment signals controlled by the remote test site via the network during the hearing test and to receive patient responses thereto. See Column 6, lines 65-66; Column 11, lines 64-67; Column 12, lines 1-2.

Since both Hou and Halpern et al disclose means for performing hearing tests over a network, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hou to include the use of a portable computer and means for testing hearing, as per the teachings of Halpern et al, since it would provide a means of remotely testing the hearing of patients utilizing a main server. It also would have been obvious to one of ordinary skill in the art to utilize a web server to access the hearing test, since Hou discloses accessing the test over the

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internet, and the world wide web is accessible over the internet. It also would have been obvious to one of ordinary skill in the art to perform other types of hearing tests such as measuring ear pressures and compliance.

5. Claims 48 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn (6,379,314) as applied to claim 47 above, and further in view of Feezor et al (3,808,354).

Horn, as discussed above, disclose an internet system for testing hearing, but fail to disclose a microphone configured to detect ambient noise; and an audio analyzer in electrical communication with the microphone for measuring the sound level detected by the microphone; and the device is configured to operate independently of a local computer.

Feezor et al, as discussed above, disclose a means for performing a hearing test over a network, and further disclose a microphone configured to detect ambient noise; and an audio analyzer in electrical communication with the microphone for measuring the sound level detected by the microphone; and the device is configured to operate

independently of a local computer. See Column 6, lines 21-24 and 37-62; Column 7, lines 15-19; Column 10, lines 7-15; Column 11, lines 30-31 and 56-64; and Column 34, lines 38-44.

Since both Horn and Feezor et al disclose means for performing a hearing test over a network, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Horn to include the use of a microphone to measure ambient noise levels, as per the teachings of Feezor et al, since it would

provide a means of determining the accuracy of the test results or inform the user to move to another location.

6. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hou (6,322,521) and Halpern et al (5,687,717) as applied to claim 66 above, and further in view of Feezor et al (3,808,354).

Hou and Halpern et al, as discussed above, disclose means for remotely testing hearing but fail to disclose the system being configured to carry out hearing tests that comply with predetermined standardized testing codes.

Feezor et al, as discussed above, disclose a system for testing hearing over a network and further disclose the system being configured to carry out hearing tests that comply with predetermined standardized testing codes. See Column 11, lines 30-31.

Since Hou, Halpern et al and Feezor et al disclose means for performing a hearing test over a network, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hou and Halpern et al to include the use of predetermined standardized testing codes, as per the teachings of Feezor et al, since it would provide a means of accurately testing the patient's hearing.

Allowable Subject Matter

7. Claims 2, 3, 6, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter: Claims 31-45 are allowable since no prior art could be found teaching or suggesting controlling the output of the hearing assessment signals such that the clinician at the test administration site determines which hearing assessment signals of the generation step are relayed locally to the patient, as claimed in Claim 31.

Response to Arguments

9. Applicant's arguments with respect to claims 1-10, 12-30, 47-49, 58 and 59 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's arguments, filed July 19, 2004, with respect to Claims 31-35, 37-43 and 45 utilizing Bosscher, Feezor et al and Pavlakos have been fully considered and are persuasive. The rejection of claims 31-35, 37-43 and 45 has been withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Szmalec whose telephone number is (703) 308-3737. The examiner can normally be reached on Monday-Friday, with second Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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